

Claims.

1. A fiber-optic diaphragm sensor comprising a diaphragm, a housing affixed to the diaphragm, a ferrule bonded to the housing with a bonding compound and an optical fiber within the ferrule, the optical fiber having a tip,
5 the improvement comprising a selection of fiber material, diaphragm material, housing material, ferrule material and bonding compound material having at least some differing thermal expansion coefficients thereamong the materials whereby the optical fiber tip to diaphragm distance changes to compensate for any temperature change induced changes in sensor sensitivity and offset dependence.
- 10 2. The fiber-optic diaphragm sensor of claim 1 wherein the housing and ferrule are bonded together adjacent the fiber tip.
3. The fiber-optic diaphragm sensor of claim 1 wherein the housing and ferrule are bonded together at a base on the housing, the base being remote from the diaphragm.
- 15 4. The fiber-optic diaphragm sensor of claim 1 wherein the fiber tip to diaphragm distance change is substantially zero over varying temperature changes.